

IN THE CLAIMS:

Please cancel claims 5, 6, 9, 20 and 22 without prejudice or disclaimer as to the subject matter contained therein.

Please amend the claims as shown in the following claims listing:

1. (Currently amended) A method ~~to wirelessly communicate data over a plurality of cellular channels~~, comprising:

a mobile device sniffing for available cellular frequency channels ~~of the plurality of cellular channels in a mobile station;~~

the mobile device requesting, from a base station, an allocation of cellular frequency channels from the available cellular frequency channels ~~from the mobile station to a base station; [[and]]~~

responsive to the requesting, the mobile device receiving an allocation from the available cellular frequency channels ~~at the mobile station in response to the request from the mobile station;~~

bonding a short-range radio channel with the allocated cellular frequency channels, thus increasing available bandwidth for data communication between the mobile station and the base station; and

transmitting data to the base station over the bonded short-range radio channel and the allocated cellular frequency channels.

2. (Currently Amended) The method of claim 1, ~~further comprising wherein said transmitting includes the mobile device transmitting, at a given point in time, communicating a first portion of data on the allocated cellular frequency channels and a second portion of the data on a the short-range radio channel between the mobile station and the base station.~~

3. (Original) The method of claim 2, wherein the short-range radio channel is Bluetooth or WLAN (802.11x).

4. (Currently Amended) The method of claim 2, further comprising ~~characterizing the ambient radio environment and the mobile device~~ dynamically discovering a plurality of available and active radio ~~channels~~ ~~protocols~~ including the short-range radio channel.

5-6. (Cancelled)

7. (Currently Amended) The method of claim 2, further comprising the mobile device scanning an ambient radio environment using a parallel set of sniffer circuits.

8-14. (Cancelled)

15. (Currently Amended) The method of claim 1, further comprising the mobile device transmitting cellular packet data conforming to one of the following protocols; cellular digital packet data (CDPD) (for AMPS, IS-95, and IS-136), General Packet Radio Service (GPRS) and EDGE (Enhanced Data for Global Evolution).

16. (Currently amended) A mobile device comprising:

a reconfigurable processor core, ~~comprising: including~~ one or more processing units, at least one of the processing units configured to calculate a number of cellular frequency channels to request from a base station for transmission of a file from the mobile device, wherein the number of requested cellular frequency channels based on corresponds to [[a]] the size of the file;

a long-range transceiver coupled to the processing units, the long-range transceiver configured to communicate over a plurality of cellular frequency channels;

a short-range transceiver coupled to the processing units and configured to communicate over a short-range radio channel; [[and]]

a radio frequency sniffer coupled to at least one of the transceivers[[;]] ~~and an antenna, coupled to the radio frequency sniffer~~ wherein the radio frequency sniffer is configured to provide signals used to dynamically discover available radio channels including the short-range radio channel; and

a circuit configured to bond the short-range radio channel with one or more of the plurality of cellular frequency channels, thus increasing a bandwidth of data

communication between the mobile device and the base station;

wherein the long-range transceiver and the short-range transceiver are configured to transmit respective portions of the file to the base station over the bonded short-range radio channel and one or more of the plurality of cellular frequency channels allocated by the base station.

17. (Previously Presented) The mobile device of claim 16, wherein the reconfigurable processor core includes a plurality of digital signal processors (DSPs).

18. (Previously Presented) The mobile device of claim 17, wherein the reconfigurable processor core includes one or more reduced instruction set computer (RISC) processors.

19. (Previously Presented) The mobile device of claim 16, further comprising a router coupled to the one or more processing units.

20. (Cancelled)

21. (Previously Presented) The mobile device of claim 16, wherein the reconfigurable processor core comprises an integrated circuit formed on a single substrate including the one or more processing units, the long-range transceiver, and the short-range transceiver.

22. (Cancelled)

23. (Previously Presented) The mobile device of claim 16, wherein the reconfigurable processor core is configured to calculate the number of channels to be used for the transmission based upon a user request.

24. (Currently Amended) The method of claim 1, further comprising the mobile device receiving from a user of the mobile device, station a request for a bandwidth sufficient to communicate at least one file.

25. (Currently Amended) The method of claim 24, further comprising the mobile device determining at the mobile station a number of channels for the allocation request based on [[a]] the size of the at least one file.

26. (Currently Amended) The method of claim 1, wherein said bonding is performed responsive to further comprising receiving a request from a user of the mobile device station to bond the allocated cellular frequency channels and a short-range radio channel.

27. (Currently Amended) The method of claim 1, wherein requesting the requested allocation includes a preference for of cellular frequency channels comprises requesting an allocation of preferably adjacent cellular frequency channels.

28. (New) A mobile communication device comprising:

a radio frequency sniffer unit configured to detect available cellular frequency channels and short-range radio channels;

a processing unit configured to request, from a base station, an allocation of one or more of the available cellular frequency channels;

a long-range transceiver and a short-range transceiver both coupled to the processing unit and configured to communicate over the cellular frequency channels and the short-range radio channels, respectively; and

a circuit coupled to the long-range transceiver and the short-range transceiver and configured to bond one or more available short-range radio channels with one or more allocated cellular frequency channels, thus increasing a bandwidth of data communication between the mobile communication device and the base station;

wherein the long-range transceiver and a short-range transceiver are further configured to transmit data to the base station over the one or more bonded short-range radio channels and the one or more allocated cellular frequency channels.

29. (New) The mobile communication device of claim 28, wherein the long-range transceiver and a short-range transceiver are further configured to concurrently transmit data to the base station over both the one or more bonded short-range radio channels and the one or more allocated cellular frequency channels.

30. (New) A mobile communication device comprising:

first means for requesting, from a base station, an allocation of available cellular frequency channels;

second means for bonding a short-range radio channel with allocated cellular frequency channels to increase available bandwidth for data communication between the mobile communication device and the base station; and

third means for transmitting data to the base station over the bonded short-range radio channel and the allocated cellular frequency channels.

31. (New) The mobile communication device of claim 30, further comprising fourth means for sniffing for available cellular frequency channels.

32. (New) The mobile communication device of claim 30, wherein said third means is configured to transmit, in parallel, data from the mobile communication device to the base station using the one or more bonded short-range radio channels and the one or more allocated cellular frequency channels.